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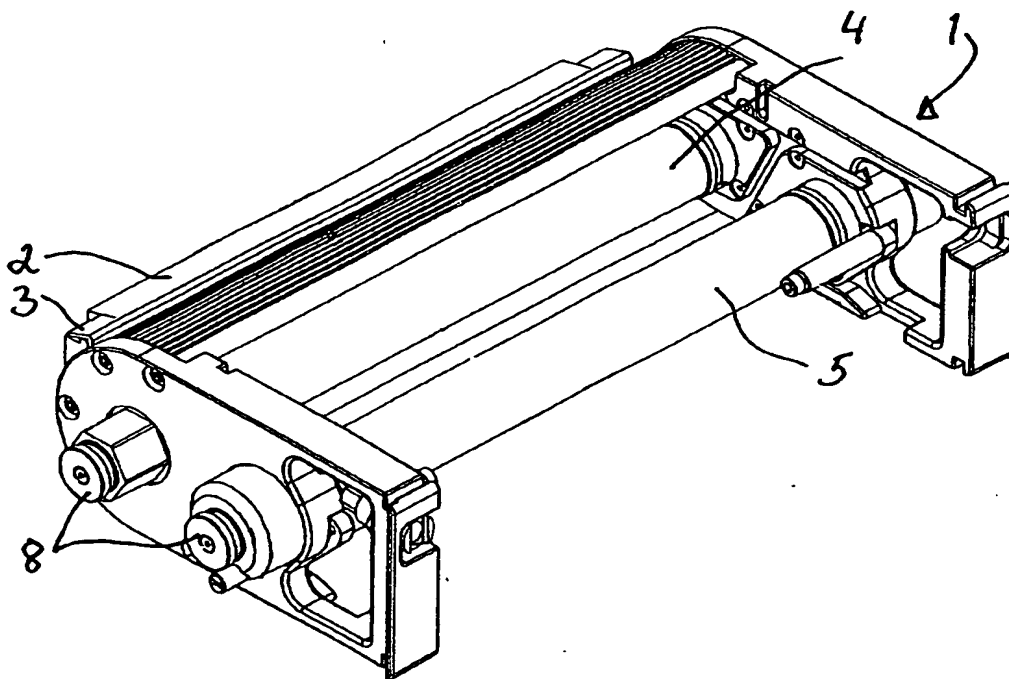
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A BOBBIN FOR A WASHING UNIT IN A PRINTING PRESS



(57) Abstract: A bobbin (6) for a cleaning cloth (2) in a washing unit (1) for a cylinder in a printing press is provided with internal, longitudinal or axial projections (6') for cooperation with corresponding longitudinal grooves (7') in a shaft (7) therefore and with embossments over at least a part of its circumferential surface.

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Preferably, the bobbin is provided with internal, longitudinal or axial projections for cooperation with corresponding longitudinal grooves in the shaft and is embossed over at least a part of its circumferential surface.

Alternatively or additionally, the cloth may be held to the bobbin by means of serrated clips.

In this way the bobbin is held in its intended position, i e it can not rotate on its shaft if the cloth is exposed to a pulling action due to friction during the cleaning operation, and the cloth in turn is held to the bobbin when exposed to said pulling action.

The Drawing

The invention will be described in further detail below under reference to the accompanying drawing, in which Fig 1 is a perspective view of a washing unit for a cylinder in a printing press, Fig 2 is a side view of a bobbin for use in the washing unit, and Fig 3 is an end view of the bobbin of Fig 2 with a shaft therefore shown in section.

Detailed Description of a Preferred Embodiment

As is well known in the printing art, a washing unit 1 may be arranged in the vicinity of a cylinder, for example a blanket cylinder, in a printing press for the purpose of cleaning the cylinder by means of a cloth in the washing unit. When the cylinder is to be cleaned, the washing unit 1 is applied with its cloth against the circumferential cylinder surface; in this stage washing liquid is preferably supplied to the cloth.

The washing unit 1 is known *per se* and is accordingly only briefly described and to the extent necessary for a proper understanding of the invention.

A cleaning cloth 2 is arranged over a pad 3 at a front end of the washing unit 1 to be brought into engagement with the cylinder to be cleaned. The cloth 2 may

be stepwise unrolled from a cloth supply roll 4 and again be rolled up after use on a cloth return roll 5.

Each cloth roll 4, 5 comprises a bobbin 6 (Figs 2 and 3) on a conditionally rotatable shaft 7 (only shown in Fig 3) in the washing unit 1. The shafts with their bobbins may be released from the washing unit 1 by locking means 8 for cloth replacement.

A clean cloth portion is stepwise supplied from the supply roll 4 to the pad 3, before the washing unit 1 is applied to the cylinder to be cleaned. The used cloth is transferred to the return roll 5.

When the entire cloth supply is used-up and the cloth 2 has been gathered on the return roll 5, the bobbin 6 with the used cloth is removed on its shaft 7 from the washing unit and discarded. A new bobbin with a clean cloth is supplied as a supply roll 4 in the proper place in the washing unit, and a new empty bobbin, to which the end of the clean cloth is attached, is mounted in the position for the return roll.

The bobbin 6 is essentially a tube, preferably made of plastic material. The tube has an inner diameter corresponding to the outer diameter of the shaft 7 on which it is to be arranged and a length adapted to the width of the cloth 2.

As is visible in Fig 3, the bobbin 6 is provided with internal, longitudinal or axial projections 6' for cooperation with corresponding longitudinal grooves 7' in the shaft 7. The purpose of this arrangement is to keep the shaft 7 and bobbin 6 from relative rotatable movements during operation.

Also, the bobbin 6 is preferably embossed over at least a part of its circumferential surface in order to prevent relative movements between the cloth 2 and the bobbin during operation.

CLAIMS

1. A bobbin (6) for a cleaning cloth (2) in a washing unit (1) for a cylinder in a printing press, c h a r a c t - e r i z e d in that the bobbin (6) is provided with
5 internal means (6') for rotationally locking it to its shaft (7) in the washing unit (1) and with external means for preventing sliding tangential movements between the bobbin and the cloth (2).
2. A bobbin according to claim 1, wherein the bobbin
10 (6) is provided with internal, longitudinal or axial projections (6') for cooperation with corresponding longitudinal grooves (7') in the shaft (7).
3. A bobbin according to claim 1, wherein the bobbin (6) is embossed over at least a part of its circumferential
15 surface.
4. A bobbin according to any of the preceding claims, wherein the bobbin (6) is made of a plastic material.

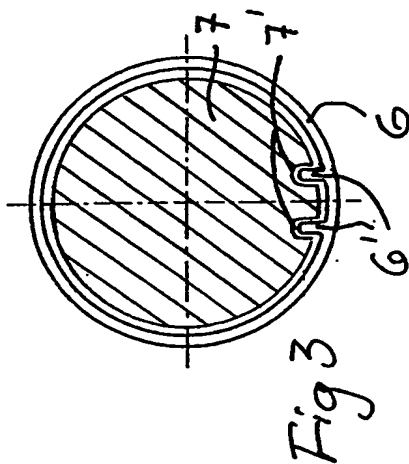
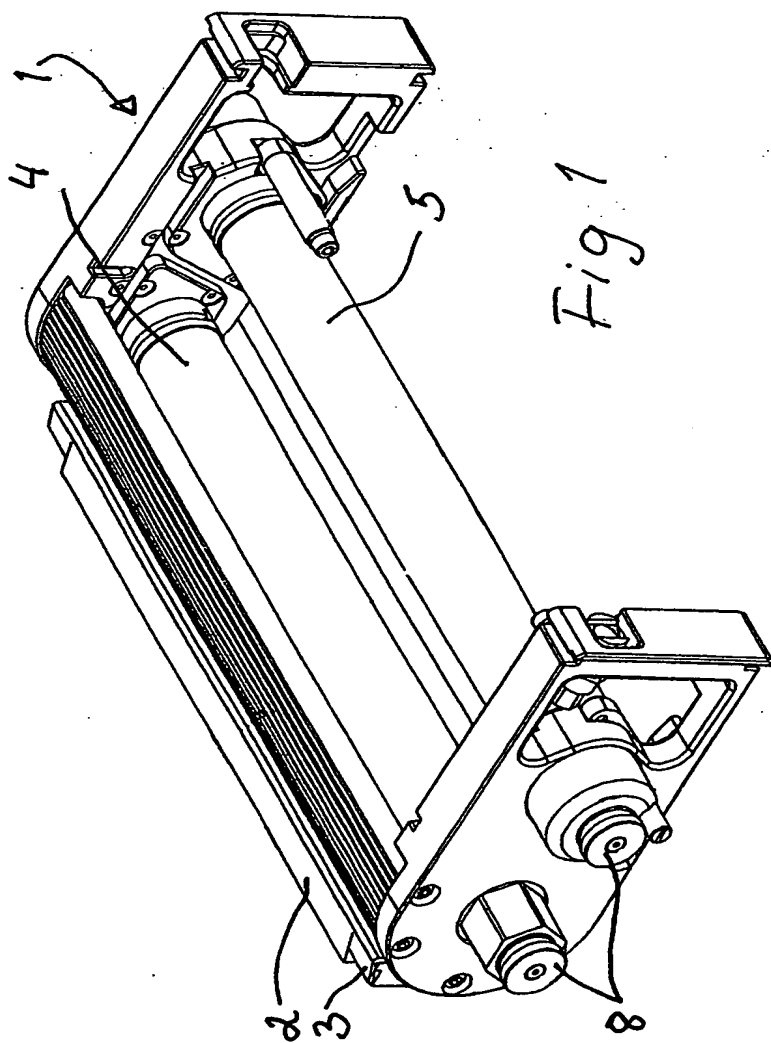
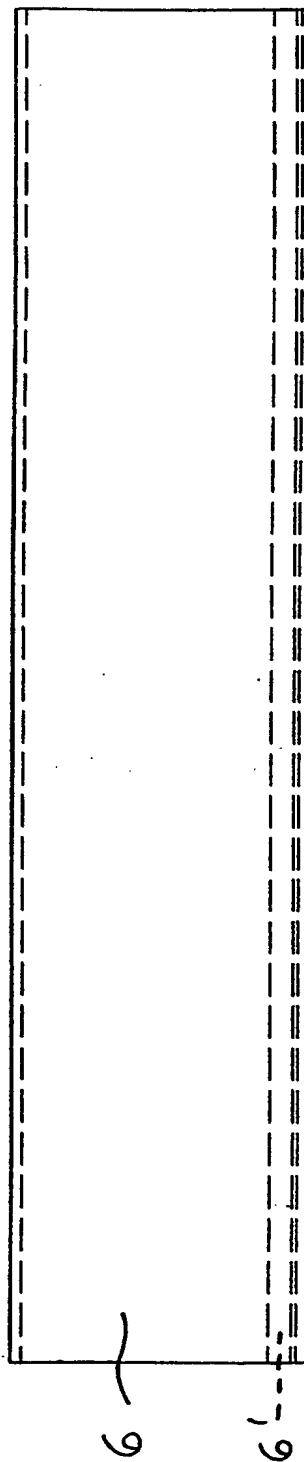


Fig 2



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B41F 35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 10018425 A1 (BALDWIN GRAFOTEC GMBH), 11 October 2001 (11.10.2001) --	1-4
A	DE 19906726 A1 (HEIDELBERGER DRUCKMASCHINEN AG), 16 Sept 1999 (16.09.1999) --	1-4
A	EP 0795402 A1 (BALDWIN-JAPAN LTD.), 17 Sept 1997 (17.09.1997) --	1-4
A	US 1968402 A (J.C. KINKER, JR), 31 July 1934 (31.07.1934) --	1-4

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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